

“Post-Drilling” Well Contaminant Summary  
Residential Wells Showing Elevated Hazard Quotients or Excess Cancer Risk

Wells	Contaminants (ug/L) and Hazard Quotients/Excess Cancer Risks							
	Aluminum	HQ	Iron	HQ	Manganese	HQ	Arsenic	HQ / Cancer Risk
Ex. 6 - Personal Privacy	6050	<1	3390	<1	361	1.1	3.1	<1
	3140	<1	4517	<1	628	2.0	<1	<1
	4698	<1	15500	1.4	413	1.3	37	$\frac{7.9}{8.2 \times 10^{-4}}$
	3290	<1	24100	2.2	669	2.1	6.5	$\frac{1.4}{1.4 \times 10^{-4}}$
	3610	<1	16060	1.5	374	1.2	3.3	<1
	44100	2.8	18700	1.7	1920	6.0	25	$\frac{5.3}{5.6 \times 10^{-4}}$

All six of these wells, and two additional wells, also had increased chloride levels in the post-drilling sampling results. The chloride values ranged from 5380 to 156,800 ug/L.

Contaminant Reference Values (ug/L)

Contaminant	Regional Screening Level Hazard Quotient = 1	Regional Screening Level Hazard Quotient = 3	Regional Screening Level Excess Cancer Risk = $1 \times 10^{-4}$
Aluminum	16,000	48,000	
Iron	11,000	33,000	
Manganese	320	960	
Arsenic	4.7	14.1	4.5

The “Hazard Quotient” is the ratio of the exposure to the substance and the level at which no adverse effects are expected. If the HQ is equal to or less than 1, then no adverse health effects are expected as a result of exposure. If the HQ is greater than 1, then adverse health effects are possible.